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EXAMINER	
AVELLINO, JOSEPH E	
ART UNIT	**PAPER NUMBER**
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	09/684,706	GELVIN ET AL.	
	Examiner	Art Unit	
	Joseph E. Avellino	2143	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *13 February 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-32,34-63 and 65-118* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-32,34-63,65-85,90-92 and 94-118* is/are rejected.

7)☐ Claim(s) *86-89 and 93* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-32, 34-63, 65-118 are presented for examination. Claims 1, 63, 80, and 83-85 being independent. The Office acknowledges the addition of claims 112-118.

Allowable Subject Matter

2. Claims 86-89 when combined, and claim 93 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim Rejections - 35 USC § 103

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1-3, 11-12, 14, 16, 18, 21, 28-30, 32, 33, 36, 42-47, 50-53, 55-61, 80-83, 92, and 94-116 and 118 are rejected under 35 U.S.C. 103(a) as being anticipated by Clare et al. (USPN 6,414,955) (hereinafter Clare) in view of Iyengar et al. ("Information Routing and Reliability Issues in Distributed Sensor Networks" IEEE, 1992) (Hereinafter Iyengar).

4. Referring to claim 1, Clare discloses a sensor network comprising a plurality of network elements including:

at least one node (Figures 1-10) coupled among a monitored environment (col. 6, lines 10-30) and at least one client computer (the Office takes the term "client computer" to be broadly construed as "any node which is accessible by a user of the system") (col. 14, lines 12-34),

wherein functions of the at least one node are remotely controllable using the at least one client computer (col. 14-lines 12-34; col. 15, lines 13-16),

wherein the at least one node provides, after the plurality of network elements are self-assembled into a multi-cluster network (i.e. "after the communicating nodes and the interfering nodes have been identified") node information including node resource cost (i.e. network self-organization and routing) and message priority (i.e. "characteristics and traffic") to the plurality of network elements (col. 4, lines 56-67; col. 15, lines 10-24 and 43-56),

wherein the data processing is distributed through the sensor network including at least one of the elements other than the client computer (i.e. "the new node is informed of the local network traffic, routing, and communication schedule") in response to the node information (col. 4, line 58 to col. 5, line 2; col. 18, lines 35-64).

Clare does not specifically disclose that data processing other than topology setup or addition of a node is distributed through the sensor network. In analogous art, Iyengar discloses another distributed sensor network (DSN) (e.g. abstract) which distributes data to be processed by other data processing units (i.e. "each sensor acts as a knowledge source and communicates to some or all other nodes in the network, to initiate the inference process") (p. 2, col. 1, first paragraph). It would have been obvious

to one of ordinary skill in the art to combine the teaching of Iyengar with Clare in order to provide an efficient method of data propagation through the network of Clare in order to take into account link/node failures and their effects on network delay as supported by Iyengar (e.g. abstract).

5. Referring to claim 2, Clare discloses the at least one node includes sensing, processing, communications, and storage devices supporting a plurality of processing and protocol layers (col. 19, line 29 to col. 21, line 41).

6. Referring to claim 3, Clare discloses the sensor network supports wireless communications (e.g. abstract).

7. Referring to claim 11, Clare discloses at least one local user is coupled to the at least one node (col. 14, lines 12-34).

8. Referring to claim 12, Clare discloses at least one redundant information pathway is established among the plurality of network elements (Figure 3).

9. Referring to claim 14, Clare discloses the plurality of node types includes at least one node of a first type (user node) and at least one node of a second type (sensor node) (Figure 14; col. 14, lines 12-34);

10. Referring to claim 16, Clare discloses the plurality of network elements automatically organize in response to the node information, wherein the automatic organizing comprises automatically controlling data transfer, processing and storage within the network (col. 6, line 35 to col. 18, line 1).

11. Referring to claim 18, Clare discloses the data processing is controlled using at least one processing hierarchy, controlling communications among the plurality of network elements (col. 15, lines 10-24).

12. Referring to claim 21, Clare discloses the functions of the at least one node include data acquisition (col. 15, lines 10-15).

13. Referring to claim 28, Clare discloses controlling data processing and data transmission in response to a decision probability of a detected event (col. 15, lines 10-15; col. 21, lines 15-25).

14. Referring to claim 29, Clare discloses the at least one node includes at least one seismic sensor (col. 19, lines 30-43).

15. Referring to claim 30, Clare-Iyengar discloses the invention substantively as described in claim 29. Clare-Iyengar does not specifically state the one sensor is external to the one node, however "Official Notice" is taken that both the concept and

advantages of providing for an external sensor to the node is well known and expected in the art. It would have been obvious to one of ordinary skill in the art to include an external sensor to provide easy accessibility to the sensor by a repairman, facilitating the ease of future upgrades or replacements.

16. Referring to claim 32, Clare discloses the plurality of network elements are self assembling, wherein search and acquisition modes of the node search for participating elements (e.g. abstract).

17. Referring to claim 33, Clare discloses the plurality of network elements are self-assembled into a multi-cluster network (i.e. defining neighbor nodes such as communicating neighbors and interfering neighbors) (col. 6, lines 35-62).

18. Referring to claim 36, Clare discloses synchronism is established among the plurality of network elements using the assembly packets (i.e. communication schedules between nodes) (col. 16, lines 28-67).

19. Referring to claim 42, Clare discloses data is collected by the node and at least one operation is performed on the data including energy detection (col. 20, lines 15-56).

20. Referring to claim 43, wherein the routing, processing, storing and fusing are performed in response to at least one result of the energy detection (col. 20, lines 15-56).

21. Referring to claim 44, Clare discloses the routing comprises selecting a data type for routing, selecting one of the plurality of elements to route the data, selecting a route, and routing the data (i.e. a sensor device transmitting data to a user node for display) (col. 18, lines 35-65).

22. Referring to claim 45, Clare-Iyengar discloses the invention substantively as described in claim 44. Clare-Iyengar does not specifically disclose transmitting data in the message as a code in a codebook. "Official Notice" is taken that both the concepts and advantages of providing for transmitting codes in messages is well known and expected in the art. It would have been obvious to one of ordinary skill in the art to include transmitting codes from a codebook in messages to the system of Clare to conserve bandwidth in a low-power system, thereby conserving available power for the network.

23. Referring to claim 46, Clare discloses the processing comprises selecting at least one data type for processing, selecting at least one processing type, selecting at least one of the plurality of network elements to perform the selected at least one processing type, and transferring the selected at least one data type to the selected at least one of

the plurality of network elements using at least one route through the sensor network (col. 18, lines 35-64).

24. Referring to claim 47, Clare discloses the selection of at least one processing type comprises determining at least one probability (i.e. decision-making) associated with a detected event (monitored environment settings) and selecting at least one processing type in response to the at least one probability (i.e. if the decision is true, do something different than if the decision is false) (Figure 15; col. 18, lines 35-64).

25. Referring to claim 52, Clare discloses the at least one node includes a bi-static sensor and a generator for producing at least one energy beam that is radiated from the plurality of nodes, wherein the at least one energy beam comprises a combined probe beam and a signal code for beam intensity control and propagation management, wherein the at least one energy beam is modulated in time to provide an identifying code corresponding ot a source node, wherein the at least one energy beam is acoustic (col. 22, lines 47 to 67).

26. Referring to claim 53, Clare discloses determining a position of the at least one node (col. 22, lines 35-67).

27. Referring to claim 55, Clare-Iyengar discloses the invention substantively as described in claim 1. Clare-Iyengar does not specifically state protecting

communications among the elements using a public key security protocol. "Official Notice" is taken that both the concept and advantages of providing for public key encryption in wireless devices is well known and expected in the art. It would have been obvious to one of ordinary skill in the art to include public key encryption to the system of Clare to provide a basic level of security, thereby reducing the occurrences of eavesdropping by hackers and malcontents.

28. Referring to claim 56, Clare discloses using a GPS device providing location and time information (col. 7, lines 58-67).

29. Referring to claim 57, Clare discloses the node has a communication modem (i.e. a wireless antenna) (Figure 14 and related portions of the disclosure).

30. Referring to claim 58, Clare discloses communications uses multihop communications (Figures 1-10).

31. Referring to claim 59, Clare discloses the monitored environment is an outdoor area (col. 7, lines 58-67).

32. Referring to claim 60, Clare discloses supporting short range and long range communications (Figure 1).

33. Referring to claim 61, Clare discloses the node is contained in a sealed and waterproof system (Figure 14, and related portions of the disclosure).

34. Claims 50, 51, 80-83, 92, 94-112 are rejected for similar reasons as stated above. Furthermore Clare discloses that a client node can be construed as the “at least one node”, wherein it is inherent that there would be a plurality of APIs able to control communication devices, otherwise the device would be unable to communicate via the network.

35. Referring to claim 113, Clare-Iyengar disclose the invention as described in claim 112. Clare-Iyengar do not specifically disclose routing data of a first type to a first device, and data of a second type to a second device, however this feature is well known in the art (i.e. users interested in temperature data are not interested in motion detection information and therefore would not be routed to those particular systems). By this rationale, "Official Notice" is taken that both the concepts and advantages of separating data destinations based on data type is well known and expected in the art. It would have been obvious to one of ordinary skill in the art to modify the system of Clare-Iyengar to route data of different types to different servers in order to separate processing over a distributed system and reducing overhead processing on one system.

36. Claims 114 and 115 are rejected for similar reasons as stated above.

37. Referring to claim 116, Clare discloses a sensor for collecting data, a preprocessor for collecting the data from the sensor (i.e. DSP) , and a processor to perform processing on the data (cols. 19-21).

38. Claim 118 is rejected for similar reasons as stated above.

Claims 4-10, 19, 25, 38-41, 48-49, 62-79, 85 and 90 are rejected under 35 U.S.C. 103(a) as being unpatentable over Clare-Iyengar in view of Myer et al. (USPN 6,615,088) (hereinafter Myer).

39. Referring to claim 4, Clare-Iyengar discloses the invention substantively as described in claim 1. Clare-Iyengar does not specifically disclose the network includes a gateway, a server, and at least one hybrid wired and wireless network. Myer discloses another sensor network which includes at least one gateway 12, at least one server 25, and at least one hybrid wireless and wired network (Figure 1; col. 2, lines 52-67). It would be obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Myer with Clare-Iyengar to facilitate device configuration in a network as supported by Myer (col. 1, lines 26-30).

40. Referring to claims 5 and 6, Clare-Iyengar discloses the invention substantively as described in claim 1. Clare-Iyengar does not disclose the at least one gateway performs management of communications with at least one remote user. Myer

discloses the at least one gateway node (control network portal 12) performs management of communications with at least one remote user (col. 4, lines 28-50). It would be obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Myer with Clare-Iyengar to facilitate device configuration in a network as supported by Myer (col. 1, lines 26-30).

41. Referring to claim 8, Clare-Iyengar discloses the invention substantively as described in claim 1. Clare-Iyengar does not specifically disclose the network is the Internet. Myer discloses the network is the Internet 22, (Figure 1). It would be obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Myer with Clare-Iyengar to facilitate device configuration in a network as supported by Myer (col. 1, lines 26-30).

42. Referring to claim 9, Clare-Iyengar discloses the invention substantively as described in claim 1. Clare-Iyengar does not disclose providing remote accessibility using WWW-based tools to data, code, management, and security functions. Myer discloses providing remote accessibility using WWW-based tools to data, code, management, and security functions (Figure 2). It would be obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Myer with Clare-Iyengar to facilitate device configuration in a network as supported by Myer (col. 1, lines 26-30).

43. Referring to claim 10, Clare-Iyengar discloses the invention substantively as described in claim 1. Clare-Iyengar does not specifically disclose that the gateway is coupled to the network elements, wherein the elements include repeaters and interrogators. Meyer discloses coupling a gateway with a plurality of network elements (Figure 1) and it is well known that repeaters and interrogators exist in the network (i.e. repeaters forward signals over long distances >100m which is necessary for the Ethernet protocol). It would be obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Myer with Clare-Iyengar to facilitate device configuration in a network as supported by Myer (col. 1, lines 26-30).

44. Referring to claims 19, 48, 49, and 85, Clare-Iyengar discloses the invention substantively as described in claim 18. Clare-Iyengar does not specifically disclose aggregating data processed in a plurality of nodes for further processing by other nodes. Myer discloses polling devices by the master controller 36 in order to monitor the devices status, which can then be sent to a user interface device for display (the device status reports collected by the master controller 36 must inherently be processed by the client GUI device, or other node, in order for it to be displayable to the user) (col. 3, lines 15-25). It would be obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Myer with Clare-Iyengar to facilitate device configuration in a network as supported by Myer (col. 1, lines 26-30).

45. Referring to claim 38, Clare-Iyengar discloses the invention substantively as described in claim 1. Clare-Iyengar does not disclose comprising at least one database separate from the plurality of network elements. Myer discloses comprising at least one database separate from the plurality of network elements (col. 3, lines 45-50). It would be obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Myer with Clare-Iyengar to facilitate device configuration in a network as supported by Myer (col. 1, lines 26-30).

46. Referring to claim 39, Clare-Iyengar in view of Myer disclose the invention substantively as described in claim 38. Clare-Iyengar in view of Myer do not specifically disclose that cooperative sensing uses information in the database to provide non-local event correlation. However, it is well known that multiple sensors are used to monitor multiple characteristics of a system (two sensors in a CPU measuring voltage and thermal temperature to ensure that a chip is operating efficiently). "Official Notice" is taken that both the concepts and advantages of providing for cooperative sensing is well known and expected in the art. It would have been obvious to one of ordinary skill in the art to include cooperative sensing to the system of Clare-Iyengar and Myer to allow numerous physical characteristics to be monitored simultaneously to provide a more detailed description of the monitored area.

47. Referring to claim 40, Clare-Iyengar in view of Myer discloses the invention substantively as described in claim 29. Claire further discloses data-driven alerting

methods that recognize conditions on user-defined data relationships (i.e. user profiles) including coincidence in signal arrival, node power status, and network communication status (col. 18, lines 35-64).

48. Referring to claim 41, Clare-Iyengar in view of Myer discloses the invention substantively as described in claim 29. Although neither Clare-Iyengar nor Myer specifically state implementing the database in a small footprint database and in a SQL database systems at a level of at least one server, it is well known that these features exist and would have been obvious to one of ordinary skill in the art to incorporate a small footprint database to the invention of Clare-Iyengar and Myer to provide the productivity and reliability that a SQL database allows, while still keeping information search and retrieval times to a minimum.

49. Claims 62, 64, 66-79, 90 are rejected for similar reasons as stated above. Furthermore Claim 62 recites limitations which are well known and expected in the art (the concept of reusing code is the basis for object-oriented programming, that code may be imported and reused in different situations) and would be considered obvious to one of ordinary skill in the art. Claims 63-79 recite limitations previously discussed and are further discussed in view of the other art below.

Claims 13, 17, 25, 65, 68, 84 and 86 are rejected under 35 USC 103(a) as being unpatentable over Clare-Iyengar in view of Kraus et al. (USPN 5,184,311) (hereinafter Kraus).

50. Referring to claim 13, Clare-Iyengar disclose the invention as described in claim 1. Clare-Iyengar do not specifically disclose the use of a plurality of layered synchronization levels. IN analogous art (i.e. data collection using distributed sensors), Kraus discloses a sensor network which comprises a plurality of sensor nodes 201-20n which report data to a plurality of intermediate nodes 221-22p which then report the aggregated and collected data to a top level station 23 (Figure 2; col. 7, lines 11-33). It would have been obvious to one of ordinary skill in the art to combine the distributed data collection techniques of Kraus to the distributed sensor domain as described in Iyengar (Figure 2) in order to realize the benefits of Kraus to the system of Iyengar, specifically the ability to monitor and characterize relatively small-scale effects rather than network-wide, thereby resulting in regional data correlation and aggregation (Kraus: col. 7, lines 15-20).

51. Claims 17, 25, 65, 68, 84 and 86 are rejected for similar reasons as stated above.

Claims 15, 54, 101, 102 and 117 are rejected under 35 U.S.C. 103(a) as being unpatentable over Clare-Iyengar in view of Davis et al. (USPN 5,742,829) (hereinafter Davis).

52. Clare-Iyengar discloses the invention substantively as described in claim 1. Clare does not disclose distributing code and data anticipated for future use through the sensor network using low priority messages, wherein the code and the data are downloadable from a storage device. Davis discloses a network wherein distributing code and data anticipated for future use through the sensor network using low priority messages (i.e. in the background), wherein the code and the data are downloadable from a storage device (it is inherent that the code/data are downloaded from a storage device) (col. 6, lines 27-65). It would be obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Davis with Clare-Iyengar to facilitate the installation of software on heterogeneous clients on the distributed network, thereby reducing installation costs and reducing downtime as supported by Davis (col. 2, lines 10-15).

53. Claims 101-102 and 117 are rejected for similar reasons as stated above.

Claims 19, 20, and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Clare-Iyengar in view of Makansi et al. (US 2002/0154631) (hereinafter Makansi).

54. Clare-Iyengar discloses the invention substantively as described in claim 1. Furthermore it is an inherent feature of Clare-Iyengar to aggregate the data to be

transmitted to a user to conserve energy by reducing the amount of packets and saving bandwidth. Clare-Iyengar does not disclose the message packets include decoy packets wherein information to be transferred is impressed on random message packets to provide communication privacy. Makansi discloses message packets include decoy packets wherein information to be transferred is impressed on random message packets to provide communication privacy on a network (e.g. abstract). It would be obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Makansi with Clare-Iyengar to provide messages to be transmitted in ways such that potential adversaries are given access to a relatively little amount of information as supported by Makansi (p. 1 ¶ 8).

55. Claim 91 is rejected for similar reasons as stated above.

Claims 9, 22-24, 27, and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Clare-Iyengar in view of Humpleman et al. (USPN 6,546,419) (hereinafter Humpleman).

56. Referring to claim 9, Clare-Iyengar discloses the invention substantively as described in claim 1. Clare-Iyengar does not disclose having the node of the first type containing a preprocessor with a state machine, an API and at least one sensor. Humpleman discloses a home sensor network wherein a first node 14 of a first type (Device A) contains a preprocessor with a state machine (it is inherent that a standard

microprocessor emulates the effects of a state machine during its pipelining of instructions, fetch, decode, execute, store, etc.), an API (INTERFACE-A.xml), and at least one sensor (h/w) (e.g. abstract; Figure 16; col. 22, lines 52-58). It would be obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Clare-Iyengar with Humpleman to be able to control a plurality of diverse devices having different capabilities to communicate in order to accomplish tasks or to provide a service as supported by Humpleman (col. 2, lines 38-45).

57. Referring to claim 22, Clare-Iyengar discloses the invention substantively as described in claim 1. Clare-Iyengar does not disclose having the node of the second type including at lest one preprocessor coupled to at lest one processor and a plurality of API's, wherein the plurality of API's are coupled to control at lest one device. Humpleman discloses a home sensor network wherein the node 14 of the second type (device B), contains at least one preprocessor coupled to at least one processor (it is well known that a server computer has multiple microprocessors embedded within the server which are either directly or indirectly coupled together), a plurality of API's (INTERFACE-A.XML and INTERFACE-B.XML), wherein the plurality of API's are coupled to control at least one sensor device (i.e. smoke detectors) (e.g. abstract; Figure 16; col. 22, lines 52-58). It would be obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Clare-Iyengar with Humpleman to be able to control a plurality of diverse devices having different

capabilities to communicate in order to accomplish tasks or to provide a service as supported by Humpleman (col. 2, lines 38-45).

58. Referring to claim 23, Clare-Iyengar discloses the invention substantively as described in claim 1. Clare-Iyengar does not disclose layering the plurality of API's. Humpleman discloses layering the plurality of API's in the device (Figure 19, reference characters 72-92). It would be obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Clare-Iyengar with Humpleman to be able to control a plurality of diverse devices having different capabilities to communicate in order to accomplish tasks or to provide a service as supported by Humpleman (col. 2, lines 38-45).

59. Referring to claim 26, Clare discloses a preprocessor (ADC) performs data acquisition, and the processor (DSP) performs signal identification (col. 18, lines 35-64).

60. Referring to claim 24, Clare-Iyengar discloses the invention substantively as described in claim 1. Clare further discloses enabling distributed resource management by providing network resource information and message priority information to the plurality of network elements (col. 14, lines 12-34; col. 15, lines 10-25). Clare-Iyengar does not specifically disclose enabling distributed resource management through the plurality of API's. However Humpleman discloses using the API's to enable distributed resource management (i.e. enabling services to be used via the API's) (Figures 15-19

and pertinent portions of the disclosure). It would be obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Clare-Iyengar with Humpleman to be able to control a plurality of diverse devices having different capabilities to communicate in order to accomplish tasks or to provide a service as supported by Humpleman (col. 2, lines 38-45).

61. Referring to claim 27, Clare discloses the processor performs reconfiguration and signal identification (e.g. abstract).

62. Referring to claim 37, Clare-Iyengar discloses the invention substantively as described in claim 1. Clare-Iyengar does not disclose managing the plurality of network elements as a distributed database using a distributed resource management protocol, wherein the plurality of network elements are reused among different applications, wherein the network elements are used in multiple classes of applications. Humpleman discloses managing the plurality of network elements as a distributed database using a distributed resource management protocol, wherein the plurality of network elements are reused among different applications, wherein the network elements are used in multiple classes of applications (the servers and clients can reside on the same node and execute both client and server applications) (col. 6, lines 18-34). It would be obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Clare-Iyengar with Humpleman to be able to control a plurality

of diverse devices having different capabilities to communicate in order to accomplish tasks or to provide a service as supported by Humpleman (col. 2, lines 38-45).

Response to Arguments

63. Applicant's arguments filed February 13, 2008 have been fully considered and are not persuasive.

64. Applicant argues, in substance, that Iyengar does not disclose distribution in response to message priority. The Examiner agrees. Message priority is discussed in Clare. A message can be marked as a high priority instructions or data. See col. 15, lines 10-24. When taken in context with Iyengar's distribution of data, it is clearly seen that the data is distributed using message priority. By this rationale, the rejection is maintained.

65. Applicant argues, in substance, that Clare does not teach controlling data transmission based on a probability of an event. The Examiner disagrees. Sensors are calibrated such that the sensor must pass a threshold level of energy. Clare discloses that the sensor's data will be compared with various signatures and if something "interesting" is found, then the microprocessor will warn other nodes (col. 21, lines 15-25). This clearly demonstrates that it is probable that an event has occurred if the detected energy matches one of these signatures and therefore the rejection is maintained.

66. Applicant argues, in substance, that Clare does not disclose self assembly of a network by sending out assembly packets. The Examiner disagrees. The nodes of Clare disclose sending out invitation packets to newly detected nodes (col. 8, lines 49-67). This can be construed as the claimed assembly packets since these invitations create a partnership between the two nodes and eventually form a network. By this rationale, the rejection is maintained.

67. Applicant argues, in substance, that Clare-Iyengar-Myer do not disclose a plurality of levels of synchronization. The Examiner disagrees. Appellant has not defined what is meant

Conclusion

68. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph E. Avellino whose telephone number is (571) 272-3905. The examiner can normally be reached on Monday-Friday 7:00-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan J. Flynn can be reached on (571) 272-1915. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Joseph E. Avellino/
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